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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/589,373

08/15/2006

Mark Alan Yoder

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02/26/2009

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EXAMINER

CHOI, WILLIAM C

ART UNIT

PAPER NUMBER

2873

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/589,373	<b>Applicant(s)</b> YODER ET AL.	
	<b>Examiner</b> WILLIAM C. CHOI	<b>Art Unit</b> 2873	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5-12 is/are allowed.
- 6) ☒ Claim(s) 1-4 and 13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>081506</u> . | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Information Disclosure Statement***

The Information Disclosure Statement (IDS), filed on 8/15/2006, was received.  
An initialized copy of the IDS is enclosed with this office action.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Specifically, applicant discloses in line 2, wherein the “assembly is biased against the optics housing by a”. Applicant fails to provide any further limitations to describe what is being claimed, thereby rendering the claim vague and indefinite. Furthermore, for this reason, the examiner was unable to make a reasonable assumption as to what applicant was intending to disclose. Therefore, this claim was not considered on the merits.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Lofland et al (US 6,625,021 B1).

In regard to claim 1, Lofland et al discloses a clamping spring for a microdisplay (column 2, line 57 – column 3, line 41, Figures 3A-C, “10”), comprising a sheet of resilient material (column 3, lines 15-19) having an interconnected plurality of alternating first and second tabs disposed around the periphery thereof, the first tabs being angled upwardly (Figure 3A, “26, 28”) and having mounting slots therein (Figure 3A, “14”), the second tabs being angled downwardly (Figure 3C, “18”); whereby force applied to said first tabs provides a consistent controlled clamping force at said second tabs (column 3, lines 14-25).

Regarding claim 2, Lofland et al discloses wherein the first and second tabs are interconnected by a generally rectangular body having an opening therethrough (column 3, lines 6-7, Figure 3A, “16, 24”).

Regarding claim 3, Lofland et al discloses wherein the resilient material is steel (column 3, lines 15-17).

Regarding claim 4, Lofland et al discloses wherein there are two first tabs and two second tabs (Figure 3A, “26” & Figure 3C, “19”).

***Allowable Subject Matter***

Claims 5-12 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: The prior art fails to teach a combination of all the claimed features as presented in claims 5-10: a clamping arrangement as claimed, specifically comprising: a digital micromirror device assembly, secured by a plurality of first shoulder bolts having apertures extending along axes of the bolts; an optical housing having a plurality of bosses supporting the digital micromirror device assembly with threaded apertures therein; and second shoulder bolts disposed through the slots of the clamping spring and the apertures of at least a portion of the first shoulder bolts and engaging the threaded apertures of at least a portion of the bosses.

The prior art fails to teach a combination of all the claimed features as presented in claims 11 and 12: a projection system as claimed, specifically comprising: a digital micromirror device assembly clamped together with a plurality of first shoulder bolts with longitudinal opening therethrough; a clamping spring for biasing the digital micromirror device assembly against the optics housing; and two or more second shoulder bolts, engaging said clamping spring, extending through said opening in selected ones of said first shoulder bolts, and engaging said threaded apertures in said optics housing.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLIAM C. CHOI whose telephone number is (571)272-2324. The examiner can normally be reached on Monday-Friday from about 9:00 am to 6 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Mack can be reached on (571) 272-2333. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/William C. Choi/  
Primary Examiner, Art Unit 2873  
February 23, 2009